

Title (en)
SYSTEMS AND METHODS FOR AUTOMATICALLY BALANCING A CENTRIFUGE

Title (de)
SYSTEME UND VERFAHREN ZUM AUTOMATISCHEN UNWUCHTAUSGLEICH EINER ZENTRIFUGE

Title (fr)
SYSTÈMES ET PROCÉDÉS D'ÉQUILIBRAGE AUTOMATIQUE D'UNE CENTRIFUGEUSE

Publication
EP 3170562 B1 20200715 (EN)

Application
EP 16199981 A 20161122

Priority
US 201562258781 P 20151123

Abstract (en)
[origin: EP3170562A1] A centrifuge rotor assembly (32) includes a chamber assembly (42), a bearing support (70), and a counterweight (80) that is substantially diametrically opposed to the bearing support with respect to the chamber assembly. The chamber assembly receives a processing chamber (16) of a fluid circuit, while the bearing support (70) receives a portion of an umbilicus (24) that is fluidly connected to the processing chamber (16). The bearing support and counterweight are rotated about a central axis of the chamber assembly by an electric drive (56) of the centrifuge rotor assembly (32), with the bearing support and counterweight remaining substantially diametrically opposed to each other with respect to the chamber assembly while being rotated about the central axis. The electric drive (56) may rotate the bearing support (70) and counterweight (80) at a plurality of different speeds, with the counterweight automatically moving with respect to the bearing support between radially innermost and radially outermost positions to balance the centrifuge rotor assembly (32).

IPC 8 full level
B04B 5/04 (2006.01); **B04B 9/14** (2006.01)

CPC (source: EP US)
A61M 1/36225 (2022.05 - EP US); **A61M 1/362265** (2022.05 - EP US); **A61M 1/3693** (2013.01 - US); **B04B 5/0442** (2013.01 - EP US); **B04B 9/12** (2013.01 - US); **B04B 9/14** (2013.01 - EP US); **B04B 2005/0492** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3170562 A1 20170524; EP 3170562 B1 20200715; US 10967389 B2 20210406; US 2017144172 A1 20170525

DOCDB simple family (application)
EP 16199981 A 20161122; US 201615358200 A 20161122